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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,884	04/13/2004	Yung Yip	10305US02	4010

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Attention: Eric D. Levinson
Imation Corp.
Legal Affairs
P.O. Box 64898
St. Paul, MN 55164-0898

EXAMINER

NGUYEN, TANH Q

ART UNIT	PAPER NUMBER
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2182

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/822,884

Applicant(s)

YIP ET AL.

Examiner

Tanh Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/26/04; 11/15/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informalities: "the housing includes a static dissipative polymer" should be replaced with "the housing is formed of a static dissipative polymer".
2. Claim 10-13 is objected to because of the following informalities:

"wherein means for dissipating the static charge" in claims 10-11, 13 should be replaced with "wherein the means for dissipating the static charge";

"wherein dissipating the static charge" in claim 12 should be replaced with "wherein the means for dissipating the static charge".

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 1-8, 10, 16-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1, 10, 16 recite "a housing having a surface resistivity in a range of approximately 10^6 ohms/square to approximately 10^{12} ohms/square". The specification

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discloses forming a housing with a PermaStat® material by RTP Company [page 14, lines 19-20], Stat-Loy® [page 14, lines 23-24] and Stat-Kon® by LNP Engineering Plastics Inc. [page 14, line 31-page 15, line 2].

A brochure by RTP Company submitted as part of the IDS titled "PermaStat® Compounds", December 2000, discloses only a surface resistivity in a range of 10^{10} ohms/square- 10^{11} ohms/square for PermaStat® [page 1, column 1]. A brochure by LNP Engineering Plastics Inc. submitted as part of the IDS titled "STAT: A guide to LNP's line of thermoplastic composites for electrostatic dissipation", 2001, discloses only a surface resistivity in a range of 10^9 ohms/square- 10^{12} ohms/square for Stat-Loy® and in a range of 10^0 ohms/square- 10^{12} ohms/square for Stat-Kon® [page 2, column 1].

The brochures do not support the material used for the housing having a surface resistivity in a range of 10^6 ohms/square- 10^{12} ohms/square.

5. Claims 3-5, 17 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a housing having a surface resistivity in a range of 10^{10} ohms/square- 10^{11} ohms/square for PermaStat®, in a range of 10^9 ohms/square- 10^{12} ohms/square for Stat-Loy® and in a range of 10^0 ohms/square- 10^{12} ohms/square for Stat-Kon® does not reasonably provide enablement for a housing having a surface resistivity in a range of approximately 10^6 ohms/square to approximately 10^{12} ohms/square. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

Claim 3 is only supported for a range of 10^{10} ohms/square- 10^{11} ohms/square if

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PermaStat[®] is used, and for a range of 10^9 ohms/square- 10^{12} ohms/square if Stat-Loy[®] is used.

Claim 4 is only supported for a range of 10^{10} ohms/square- 10^{11} ohms/square if PermaStat[®] is used, for a range of 10^9 ohms/square- 10^{12} ohms/square if Stat-Loy[®] is used, and for a range of 10^0 ohms/square- 10^{12} ohms/square if Stat-Kon[®] is used.

Claim 5 is only supported for a range of 10^0 ohms/square- 10^{12} ohms/square if Stat-Kon[®] is used.

Claim 17 is only supported for a range of 10^{10} ohms/square- 10^{11} ohms/square if PermaStat[®] is used, for a range of 10^9 ohms/square- 10^{12} ohms/square if Stat-Loy[®] is used, and for a range of 10^0 ohms/square- 10^{12} ohms/square if Stat-Kon[®] is used.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albretch et al. (US 2002/0159182A) in view of Waggoner et al. (US 2004/0113129A) and "STAT: A guide to LNP's line of thermoplastic composites for electrostatic dissipation" (STAT).

9. As per claim 1, Albretch teaches a data cartridge [40, FIG. 3], comprising:

a housing [41, FIG. 3];

a non-tape storage medium contained within the housing [[0055], line 5; FIG. 24, FIG. 25];

circuitry contained within the housing for accessing the non-tape storage medium [[0055]]; and

an externally accessible electrical connector supported by the housing and electrically coupled to the circuitry [48, FIG. 3; [0049], lines 3-6].

Albretch essentially does not teach the housing being formed of materials having a surface resistivity in a range of 10^6 ohms/square- 10^{12} ohms/square.

Waggoner teaches using static dissipative materials for housing and for shielding electronic equipment and components. STAT teaches the desirability to include static dissipative materials, which have a surface resistivity in a range of 10^6 ohms/square- 10^{12} ohms/square for electrical/electronic equipment and components protection.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use static dissipative materials with a surface resistivity in a

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range of 10^6 ohms/square- 10^{12} ohms/square for the housing, as is taught by Waggoner and STAT, in order to protect the data cartridge.

Note that the range of the surface resistivity is dependent on the material used, and there is no patentability in using a different material in order to obtain a different range - as using static dissipative material for housing of electronic equipment is known in the art [Waggoner, STAT], and as the static dissipative material is not invented by applicant.

10. As per claim 2, STAT teaches the National Fire protection Association (NFPA) calling for dissipating approximately 5,000 volts DC to approximately 500 volts DC in less than approximately 0.5 seconds. It would have also been obvious to one of ordinary skill in the art at the time the invention was made for the housing to adapt to such dissipation in order to conform to NFPA specification.

11. As per claims 3-4, STAT teaches Stat-Loy[®], hence a dissipative polymer (page 14, lines 12-24 of applicant specification); Waggoner teaches static dissipative polymer.

12. As per claims 4-5, STAT teaches Stat-Kon[®], hence a carbon-filled resin and at least one of polypropylene, polyethylene, polystyrene, nylon, polycarbonate, ABS, and acrylic (page 14, line 25-page 15, line 2 of applicant specification).

13. As per claims 6-8, Albretch teaches the housing conforming to industry standard dimensions for a magnetic tape data cartridge [[0012], lines 1-3]; the non-tape storage medium comprising a disk-shaped storage medium [[0055], line 5]; and the non-tape storage medium comprising a solid-state storage medium [240, FIG. 23].

14. As per claims 9-10, see the rejections of claims 1-2 above.

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15. As per claims 11-15, see the rejections of claims 3-6 and 8 above.
16. As per claim 16, see the rejections of claims 1, 3 above.
17. As per claims 17-20, see the rejections of claims 4, 2, 6, 8 above.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

18. Claims 1-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Albretch et al. in view of claims 1-5 of U.S. Patent No. 6,915,977 (US 977).

Claims 1-5 of US 977 claim a data cartridge comprising a housing with the characteristics of the housing in claims 1-5, 9-13, 16-18 of the current application. Claims 1-5 of US 977 do not claim the data cartridge being a non-tape data cartridge.

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Albretch teaches the data cartridge being a non-tape data cartridge and the limitations associated with the non-tape data cartridge (see teachings of Albretch above). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a housing for the non-tape data cartridge in Albretch with the characteristics of the housing claimed in claims 1-5 of US 977 in order to provide the same protection to the non-tape data cartridge.

19. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 10, 15-16 of copending Application No. 10/047,280 (SN 280) in view of claims 1-5 of U.S. Patent No. 6,915,977 (US 977).

Claims 1-5 of US 977 claim a data cartridge comprising a housing with the characteristics of the housing in claims 1-5, 9-13, 16-18 of the current application. Claims 1-5 of US 977 do not claim the data cartridge being a non-tape data cartridge. Claims 1, 10, 15-16 of SN 280 claim a non-tape data cartridge and the limitations associated with the non-tape data cartridge. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a housing for the non-tape data cartridge claimed in claims 1, 10, 15-16 of SN 280 with the characteristics of the housing claimed in claims 1-5 of US 977 in order to provide the same protection to the non-tape data cartridge.

This is a provisional obviousness-type double patenting rejection.

20. Claims 1-20 are provisionally rejected on the ground of nonstatutory

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obviousness-type double patenting as being unpatentable over claims 1, 10, 15-16 of copending Application No. 10/047,280 (SN 280) in view of Waggoner et al. and STAT.

Claims 1, 10, and 15-16 of SN 280 claim a non-tape data cartridge and the limitations associated with the non-tape data cartridge.

Waggoner teaches using static dissipative materials for housing and for shielding electronic equipment and components. STAT teaches the desirability to include static dissipative materials, which have a surface resistivity in a range of 10^6 ohms/square- 10^{12} ohms/square for electrical/electronic equipment and components protection.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use static dissipative materials with a surface resistivity in a range of 10^6 ohms/square- 10^{12} ohms/square for the housing, as is taught by Waggoner and STAT, in order to protect the non-tape data cartridge.

This is a provisional obviousness-type double patenting rejection.

Conclusion


21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Q. Nguyen whose telephone number is 571-272-4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TANH Q NGUYEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100



January 5, 2007

TQN
January 5, 2007